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| 10/021,726      | 12/12/2001  | Yen-Chang Chiu       | 39088/242049        | 4640             |

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EXAMINER

PHAM, BRENDA H

ART UNIT PAPER NUMBER

2664

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/021,726

**Applicant(s)**

CHIU ET AL.

**Examiner**

Brenda Pham

**Art Unit**

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12/12/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-33 is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-38 are pending in this application.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 34 is rejected under 35 U.S.C. 102(e) as being anticipated by Abrol (US 6,507,582 B1).

Claim 34, Abrol discloses a data frame format to be used in a wireless communication system, wherein said data frame at least includes a data packet and a field containing a data value representing a sequence number of said data frame which enables said wireless communication system to detect whether said data frame is lost during a wireless communication process (column 6, lines 21-30).

**{Abrol teaches that the determination of lost data is made by comparing the byte sequence number indicated by the most recently received RLP data frame to the byte sequence number corresponding to the byte sequence number of the latest previous data byte successfully received.}**

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrol (US 6,507,582 B1).

Claims 35-38, as explained in the rejection statement of claim 34 (parent claim), Abrol teaches all the claim limitation as recited in claim 1.

Although Abrol does not teach wherein said data frame further includes a field containing an error detection code, wherein said error detection code contains a checksum data value/a parity check data value or a cyclic redundancy check data value, it is well known in the art and also in applicant admitted prior art that the error detection code for commonly used in wireless communication can be a checksum data value of the data packet, a parity check data value or a cyclic redundant check (CRC) data value.

Therefore, it would have been obvious to those having ordinary skill in the art to applied to the content of the message an agreed-upon algorithm (e.g., parity check, cyclic redundancy check or checksum value) prior to its transmission so as to generate a corresponding error detection code.

***Allowable Subject Matter***

6. Claims 1-33 are allowed over prior art.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art made of record fails to teach or fairly suggest in combination receiving a wireless signal carrying a data frame by a wireless signal receiving apparatus, wherein said data frame includes a field containing a first data value representing a sequence number of said data frame, and said wireless signal receiving apparatus records a second data value representing a sequence number next to that of the last data frame being receiving said wireless signal receiving apparatus; comparing the first data value with the second data value to determine whether the data frame is lost during the wireless communication process; if the first data value is different from the second data value, either generating an alarm signal by the wireless signal receiving apparatus or transmitting a request signal to a wireless input apparatus to request the wireless input apparatus to retransmit the lost data frame to the wireless signal receiving apparatus.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Garcia et al discloses a system and method for facilitating both in-order and out-of-order packet reception in a SAN includes requester and responder nodes that maintain local copies of a message sequence number. Each request packet includes an ordering field specifying whether the packets must be received in-order.

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Tsunoda (US 6,516,435 B1) discloses a frame includes sequence number for provide an error correction scheme which can produce redundant packets easily even in the case of using re-transmission.


***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

July 28, 2005  
Brenda Pham

A handwritten signature in black ink that reads "Brenda A. Pham". The signature is written in a cursive style with a large, stylized 'B' and 'P'.